

driving event, that the zoom level is to be adjusted. At least one driving event indicates a transition from a highway to a surface road. The unified user interface is responsive to user input causing adjustment of the zoom level or translation of the map information along a particular direction. Operations further comprise receiving user input causing translation of the map information along a particular direction, the user input comprising a swiping motion to indicate the particular direction; accessing a portion of map information based on the translation of the map information; and updating the combined view to present the portion of map information. Updating the combined view comprises: identifying that a location of the vehicle is not included in the portion of map information; and updating the combined view to include the portion of map information, wherein the autonomous visualization comprises a graphical depiction of the vehicle, and wherein the graphical depiction of the vehicle is not included in the combined view. Updating the combined view comprises: identifying that a location of the vehicle is not included in the portion of map information; adjusting the zoom level, such that a updated portion of map information is identified, wherein the updated portion of map information includes the location; and updating the combined view based on the adjusted zoom level, wherein the autonomous visualization comprises a graphical depiction of the vehicle, and wherein a size of the graphical depiction of the vehicle is reduced in the combined view.

[0185] Example embodiments may further include a system comprising one or more processors and non-transitory storage media storing instructions which cause the one or more processors to render a user interface for presentation via a display included in a vehicle, wherein the user interface: presents a combined view which unifies an autonomous visualization and map information, wherein the autonomous visualization comprises a graphical depiction of the vehicle; responds to selection of an icon of a plurality of icons, the icons being associated with control of respective vehicle functionality, wherein in response to selection, the user interface presents an icon user interface; and dynamically adjusts the combined view, such that the icon user interface does not occlude the combined view.

[0186] The above embodiments may include one or more of the following. The display is touch-sensitive, and wherein the user interface responds to touch input. The user interface responds to one or more verbal commands. The instructions cause the one or more processors to access contextual information associated with operation of the vehicle, wherein the contextual information indicates the vehicle is in a driving mode, and wherein the autonomous visualization comprises a graphical representation of a real-world environment proximate to the vehicle. The graphical representation of the real-world environment comprises one or graphical depictions of other vehicles which are proximate to the vehicle. The autonomous visualization is updated by the one or more processors at a threshold frequency. To update the autonomous visualization, the instructions cause the one or more processors to: obtain information determined from image sensors positioned about the vehicle, the information reflecting position information regarding other vehicles proximate to the vehicle; access respective models associated with the other vehicles; and render the models for inclusion in the combined view. Control of vehicle functionality comprises control of a heating, ventilation, and air conditioning, system, or control of a music application, or

control of a navigation user interface. The instructions cause the one or more processors to access contextual information associated with operation of the vehicle, wherein the contextual information indicates the vehicle is in a navigation mode, wherein the combined view further unifies navigation information, wherein, for the combined view, the autonomous visualization comprises: a graphical representation of a real-world environment proximate to the vehicle, wherein, for the combined, view the navigation information comprise: one or more graphical representations of respective driving events which are within a threshold distance or driving time of a location of the vehicle, and wherein, for the combined view, the map information comprises a graphical representation of a portion of a map associated with the location of the vehicle. A particular driving event comprises exiting a highway, and wherein the graphical representation of the particular driving event comprises an indication of a number of lanes over which the vehicle is to move. The graphical representation of the particular driving event comprises an animation of the graphical depiction of the vehicle moving over the number of lanes. A zoom level associated with the combined view is increased based on the particular driving event. A size of the graphical depiction of the vehicle is reduced based on the zoom based on the zoom level, and wherein the portion of the map is increased in area. A graphical representation of a route is included in the combined view, wherein the graphical representation of the route summarizes one or more upcoming driving events which are associated with the portion of the map. The autonomous visualization includes the graphical depiction of the vehicle being in a particular lane of a plurality of lanes. Dynamically adjusting the combined view comprises: reducing a size of the combined view in the user interface, and adjusting the combined view to be in a first portion of the user interface. The icon user interface is in a second portion of the user interface, wherein the second portion does not occlude the first portion. The user interface: responds to user input directed to the icon user interface, wherein the user input causes adjustment of vehicle functionality associated with the selected icon; and dynamically adjusts the combined view to substantially encompass the user interface, wherein the icon user interface is removed from inclusion in the user interface. The icon user interface is associated with connecting a trailer to the vehicle. The icon user interface presents an indication of a measure of distance between the trailer and the vehicle, and wherein the icon user interface presents images or video obtained from image sensors about the vehicle. The autonomous visualization comprises a graphical depiction of the trailer. The user interface presents the icons on a side of the display proximate to a user selecting the icon.

[0187] Example embodiments may include methods, systems, and non-transitory computer storage media. An example non-transitory computer storage media stores instructions for execution by a system of one or more processors, the system being included in a vehicle, and the instructions causing the one or more processors to perform operations comprising: causing presentation, via a display of the vehicle, of a unified user interface comprising a combined view which aggregates an autonomous visualization, map information, and navigation information, wherein the combined view is associated with a zoom level indicating an area of a real-world environment reflected in the combined view, and wherein the vehicle is in a navigation mode